he "Food, Fun, and Fitness Internet Program for Girls" takes a lively, upbeat approach to teach girls about nutrition and fitness. Young African-American girls who worked with the program ate one more serving a day of a fruit,

a veggie, or an all-fruit juice—and spent more time in healthful physical activity—than before they began visiting the program's website. That's according to Deborah Thompson, a behavioral science researcher and assistant professor of pediatrics with the ARS Children's Nutrition Research Center at Baylor College of Medicine in Houston, Texas.

Thompson and colleagues created the program and evaluated how effective it was in motivating 78 volunteers—Internet-savvy African-American girls age 8

to 10—to adopt healthy food and fitness habits. Thompson says those habits "are key to preventing overweight and obesity."

Risk of overweight or obesity among Black girls—age 6 to 11—is higher than that of girls—of the same age range—in some other racial or ethnic groups.

Volunteers for the study used their home computers to log on to the "Food, Fun, and Fitness" website, where they could watch the unfolding drama of six appealing comic-strip characters—young girls very much like themselves. The cartoon personalities struggle with meeting the same food and fitness goals as the volunteers, that is, to eat at least five servings a day of fruit, veggies, and/or 100-percent fruit juice; drink at least five glasses of water; and devote more time to physical activity. Volunteers were paid for their participation.

"Our results showed relatively high log-on rates to the website, low drop-out rates, and statistically significant increases in fruit, 100-percent fruit juice, and vegetable consumption and physical activity over the 8-week study," says Thompson.

For all of its light-hearted moments and drama worthy of a daytime soap opera, the intent of this interactive program is, in fact, deadly serious. Childhood overweight and obesity can lead to onset of life-threatening illnesses, including type 2 diabetes, cardiovascular disease, and certain kinds of cancers.

Thompson and Houston colleagues Tom Baranowski, Karen Cullen, Kathy Watson, and others documented results of this pilot study in the journals *Health Education Research* in 2007 and *Preventive Medicine* in 2008. They are now planning a large-scale study of 400 children and their parents to evaluate the longer-term effects of the program on food choices, physical activity, and obesity risk.

THROUGH COMPUTER FUN, GIRLS IMPROVE FITNESS AND FOOD CHOICES



"Food, Fun, and Fitness" was influenced by well-established theories of behavioral science. But it is nevertheless strongly contemporary: The study was conducted entirely over the Internet.

"Our investigation was one of the few—targeted to an at-risk group of young volunteers—to demonstrate that a behavioral-theory-based obesity-prevention program, delivered via the Internet, could change viewers' food choices and physical activity," says Thompson.

Of course, sitting at a computer is often disparaged as sedentary. But time spent interacting enjoyably with the on-screen friends at "Food, Fun, and Fitness" may help young viewers move a step closer to better fitness and food habits for a lifetime.—By Marcia Wood, ARS.

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described at www.nps.ars.usda.gov.

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STEPHEN AUSMUS (D446-1)



The "Food, Fun, and Fitness Internet Program for Girls" uses lively, educational comic strips geared toward 8- to 10-year-old African-American girls to promote better food choices and physical activity.